

EPA's comments on the New York City Department of Environmental Protection (NYCDEP) revised risk assessment summaries provided on July 26, 2019 are provided below.

1. Section 1.3.1 Content is good, but some editorial errors. In the first paragraph, change "USEPA HQ" in the fifth sentence to "USEPA hazard quotient (HQ)". Remove "poses an elevated risk to human health" from the end of the last sentence of the first paragraph.
2. Section 1.3.3.1 Baseline Human Health Risk Assessment in Reference Areas: The final sentence in this section is inaccurate and should be replaced. Replace "The BHHRA demonstrates that human health risks are similar in the reference area and the Study Area" with "The BHHRA demonstrates that the COPCs contributing to human health risk are similar in the reference area and the Study Area, but the associated risk levels were two to four times lower in the combined reference areas as compared to the Study Area."
3. The last paragraph in Section 1.3.2 summarizes the HHRA and BERA COPCs as primary and secondary, and the last sentence states, "The focus of the OU2 FFS will be on the primary risk contributors." We've said, multiple times now, that they need to focus on all of the COPECs. That sentence should be revised to state, "The OU2 FFS will include all COPCs."
4. Section 1.3.3 Reference Areas: The 5th paragraph, 3rd sentence, "These reference waterbodies are urban in nature, they all receive stormwater and tidal inputs, and the areas with CSO have similar magnitude of flows and histories with regard to CSO as the Site." The first part of the sentence is correct, but the part about "CSOs with similar magnitude of flows and histories" is not supported and should be deleted.
5. Section 1.3.3 Reference Areas: 4th sentence, "The reference waterbodies represent the physical and chemical conditions and processes in the absence of contributions from the Site." This statement is misleading and should be deleted. While the reference water bodies represent other dead-end water bodies in the NY Harbor system that are not impacted by contaminants from Newtown Creek, they all received contamination from other sources during the last 100+ years of industrial/commercial activity on each individual water body. To infer that contamination in any of the reference area water bodies is "background" is not true and is not acceptable. It is not reasonable to expect that any kind of remedy at Newtown Creek would use the contaminant levels at any of the reference area water bodies as a cleanup goal.
6. Section 1.3.3.2, EPA stated that the three bullets should be deleted in the last draft FFS, but NYC revised them instead. The second and third bullet are acceptable. However, the first bullet states, "Toxicity: There is high survival in the reference area sediment toxicity tests.", and then goes on to state that 28 day mean survival in the reference areas ranged from 13% to 100%, and 10 day mean survival ranged from 31% to 100%. Survival of 13% and 31% is not "high survival". As noted in EPA's previous comment, there was significant reference area toxicity, but it was lower than in the Study Area. In the BERA (Section 8.3.3.1, page 95), the same paragraph that NYC quotes from in the FFS states, "The CA% survival of the 28-day test ranged from 13% to more than 100% in the reference areas and from 0% to 97% in the Study Area." The BERA (Section 8.3.3.1, page 96), the same paragraph that NYC quotes

in the FFS states, “The CA% survival of the 10-day test ranged from 31% to more than 100% in the reference areas and from 0 to 83% in the Study Area.” If NYC is going to include data and results from the BERA, it must be fully explained and in the proper context. A direct quote from the BERA is acceptable, but NYC’s interpretations cannot stray from what is written in the BERA. Revise the text to directly quote the BERA without interpretation, or delete the first bullet.

7. Section 1.3.3.2, last paragraph, the first sentence states, “The survival in toxicity tests in the reference areas indicate that there is little risk to benthic organisms in the reference areas as compared to the Study Area.” This statement is misleading, revise to state, “The survival in toxicity tests for both the reference areas and the Study Area indicate risk to benthic organisms, though the risk in the reference areas was lower.”
8. Section 1.3.3.2, last paragraph, third sentence states, “These lines of evidence indicate low risk to benthic communities in the reference areas.” The lines of evidence do not indicate “low risk” to benthic communities. Revise the sentence to state, “These lines of evidence indicate lower risk to benthic communities in the reference areas than in the Study Area.”
9. Section 1.3.3.2, last paragraph, last sentence states, “The BERA demonstrates that the hazard quotients, especially for mobile species in the reference areas are similar to the hazard quotients for these species in the Study Area indicating a regional impact to this line of evidence.” Delete this sentence as it is out of context and misleading. The BERA actually states that “For some receptor-COPEC pairs (e.g., blue crab and copper, mummichog and copper, striped bass and dioxins/furans), LOEC-based HQs for the four Phase 2 reference areas are greater than 1 and the same magnitude or similar to the Study Area. For Total PCB congeners, Study Area-wide LOEC-based HQs for blue crab, mummichog, and striped bass are higher than those for the reference areas. Spatial examination shows a tendency for tissue COPEC concentrations to increase moving upstream, with some exceptions.”